INDIANA OFFICE OF ENERGY & DEFENSE DEVELOPMENT

www.energy.in.gov

Biodiesel / B20 Fact Sheet

EMISSIONS

The Clean Air Act Section 211(b) submitted to the U.S. Environmental Protection Agency (EPA) shows that biodiesel is the first and only alternative fuel to have successfully completed the required health effects testing.

These tests concluded that biodiesel significantly reduced virtually all regulated emissions and showed biodiesel does not pose a threat to human health.

Emission Type	B20
Regulated	
Total Unburned Hydrocarbons	-20%
Carbon Monoxide	-12%
Particulate Matter	-12%
NOx*	+2%

http://www.biodiesel.org/pdf_files/fuelfactsheets/emissions.pdf

***Though NOx is shown to increase slightly, they also have the potential to decrease depending on the type and size of engine. Additionally, biodiesel's lack of sulfur allows the use of NOx control technologies that cannot be used with conventional diesel.**

Biodiesel is the name of a clean burning alternative fuel, produced from domestic, renewable resources.

Biodiesel contains no petroleum, but it can be blended at any level with petroleum diesel to create a biodiesel blend. It can be used in compression-ignition (diesel) engines with little or no modifications.

Biodiesel is simple to use, biodegradable, nontoxic, and essentially free of sulfur and aromatics.

PERFORMANCE

Biodiesel has a higher octane rating than conventional diesel. Biodiesel has been tested for more than 50 million miles and has showed similar fuel consumption, torque and horsepower as conventional diesel fuel. It also has superior lubricity and has the highest BTU content of any alternative fuel.

Biodiesel (B20) freezes at temperatures 3 degrees to 5 degrees Fahrenheit higher than petrodiesel but it has been used in places such as upper Wisconsin and Iowa during -25 degrees Fahrenheit with no reported problems. (Reported by EPA)

AVAILABILITY

For B20 locations in Indiana please visit OED's site: www.in.gov/energy/pumpmap/

For locations across the U.S. please visit the National Biodiesel Board's site: http://www.biodiesel.org/buyingbiodiesel/retailfuelingsites/default.shtm

BENEFITS

Biodiesel does not contain sulfur or aromatics and its usage results in substantial reduction of unburned hydrocarbons, carbon monoxide and particulate matter (PM). For every unit of energy needed to produce a gallon of biodiesel, 3.24 units of energy are gained.

Biodiesel can be manufactured using existing industrial production capacity and used with conventional equipment it provides substantial opportunity for immediately addressing energy security issues.

PRODUCTION FACILITIES

Indiana currently has three (3) biodiesel production facilities slated. Two are currently under construction and one has been announced.

Under Construction: Integrity Bio-diesel and Evergreen Renewables
Announced: Louis Dreyfus

Listings of the current ethanol and biodiesel production facilities can be found on OED's site at: http://www.in.gov/energy/pumpmap/.

RESOURCES

For additional information please visit the following sites:

National Biodiesel Board
www.biodiesel.org/
Indiana Soybean Board
www.indianasoybeanboard.com/
Environmental Protection Agency
Main
www.epa.gov/
Biodiesel Study
www.epa.gov/otaq/models/biodsl.htm
North Carolina State University Study
www.ncdot.org/doh/preconstruct/tpb/research/download/2004-18FinalReport.pdf
Alternative Fuels Data Center
www.afdc.nrel.gov

SAFETY

Biodiesel is biodegradable. It has a high flashpoint and low volatility so it does not ignite as easily as petrodiesel. It is nontoxic which makes it safe to handle, transport and store.